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THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP			GREY, CHRISTOPHER P	
100 GALLERIA PARKWAY, NW				
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ATLANTA, GA 30339-5948			2667	

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

✓

Office Action Summary

Application No.

09/871,351

Applicant(s)

HOLMQUIST ET AL.

Examiner

Christopher P. Grey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment date April 11, 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-90 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-90 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Responsive to the amendment received on April 11, 2005, the amended specification and new claims are entered as requested. Claims 9, 18, 26-32 and 47-60 are cancelled and new claims 68-90 are added as requested.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8, 10-17, 19-25, 33-46 and 61-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delvaux (US 6718419) in view of Delattre et al. (US 6606302)

Claim 1, 68 Delvaux discloses an ATM layer device (Fig 8 element 134) supporting a plurality of physical layer devices (Fig 8 elements 136). Delvaux discloses a number of different service classes (Col 12 lines 10-29), where one skilled in the art can appreciate any two to be applied. Delvaux discloses two ports (see fig 8) for each physical layer device. Delvaux also discloses an interface between the ATM layer device and a plurality of physical layer devices (Col 13 line 66- Col 14 line 18). Delvaux discloses using a physical layer address to establish a connection. Delvaux also discloses using a physical address to select a range of possible physical devices to which a connection

can be established (Col 15 lines 17- Col 16 line 21). Delvaux does not specifically disclose each class of service corresponding to a port.

Delattre et al. (Delattre 'hereinafter') discloses a number of shapers (defined by class of service, VBR and ABR) dedicated for their respective ports (see fig 5a and Col 9 lines 40-59).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the connection of an ATM network device to a plurality of physical network devices as disclosed by Delvaux with the distribution of shapers from an ATM network as disclosed by Delattre. The motivation for this modification is to establish flow control (Col 5 lines 27-43), within channel ports associated to a specific address.

Claim 2, 69 Delvaux does not disclose each channel/ port being adapted to carry either priority data or non-priority data.

Delattre discloses establishing priority within the network (Col 1 lines 36-67), and a number of shapers dedicated to a particular port based on this priority (Col 9 lines 21-35).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the teachings of Delvaux with the transmission of shapers as disclosed by Delattre in order to establish a certain degree of priority within the network (Col 1 lines 36-46). The motivation is the same as that for claim 1 and furthermore to establish priority.

Claim 3, 70 Delvaux discloses different classes having different timing relations (real-time or non-real-time) between source and destination (Col 12 lines 10-48). Delvaux

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does not specifically disclose priority data as real-time data, and non-priority data as non-real-time data. However, Delattre discloses real time data being considered as priority data (Col 1 lines 36-45).

Claim 4, 71 Delvaux discloses a number of service classes defined by a constant bit rate and a variable bit rate (Col 12 lines 10-29).

Claim 5, 72 Delvaux discloses an interface conforming to a UTOPIA level 2 specification (Col 13 line 66- Col 14 line 18).

Claim 6, 73 Delvaux discloses a number of physical layer devices connected to one another (see fig 8), where it would have been obvious to one skilled in the art that any of these physical layer devices can act as an external physical layer device.

Claim 7, 74 Delvaux discloses an ATM network providing switching (Col 1 line 66- Col 2 line 9).

Claim 8, 75 Delvaux does not disclose DSLAM, however DSLAM is well known in the art as disclosed in the prior art (background) of the specification (Page 5 lines 9-15).

Claim 10, 76 Delvaux discloses an ATM layer device (Fig 8 element 134) supporting a plurality of physical layer devices (Fig 8 elements 136). Delvaux discloses a number of different service classes (Col 12 lines 10-29), where one skilled in the art can appreciate any two to be applied. Delvaux discloses two ports (see fig 8) for each physical layer device. Delvaux also discloses an interface between the ATM layer device and a plurality of physical layer devices. Delvaux also discloses a number of physical layer device addresses (Col 13 line 66- Col 14 line 18). Delvaux also discloses an address extension device (element 160 in fig 8) connected to the interface (Col 14 line 57-Col 16

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line 16), inherently known as an address expansion device. Delvaux discloses an address bus (second local interface- element 169 in fig 8 and Col 14 line 57- Col 16 line 16) connecting the address extension device to a plurality of physical layer devices (second plurality of channel connections). Delvaux does not specifically disclose each port corresponding to a class of service.

Delattre et al. (Delattre 'hereinafter') discloses a number of shapers (defined by class of service, VBR and ABR) dedicated for their respective ports (see fig 5a and Col 9 lines 40-59).

It would have been obvious to one of the ordinary skill in the art to modify the connections, including the address extension device as disclosed by Delvaux with the distribution of shapers from an atm network as disclosed by Delattre. The motivation for this modification is to establish flow control (Col 5 lines 27-43), within channel ports associated to a specific address.

Claim 11, 77 Delvaux does not disclose each channel/ port being adapted to carry either priority data or non-priority data.

Delattre discloses establishing priority within the network (Col 1 lines 36-67), and a number of shapers dedicated to a particular port based on this priority (Col 9 lines 21-35).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the teachings of Delvaux with the transmission of shapers as disclosed by Delattre in order to establish a certain degree of priority within the network

(Col 1 lines 36-46). The motivation is the same as that for claim 1 and furthermore to establish priority.

Claim 12, 78 Delvaux discloses different classes having different timing relations (real-time or non-real-time) between source and destination (Col 12 lines 10-48). Delvaux does not specifically disclose priority data as real-time data, and non-priority data as non-real-time data. However, Delattre discloses real time data being considered as priority data (Col 1 lines 36-45). The motivation is the same as that for claim 10.

Claim 13, 79 Delvaux discloses a number of service classes defined by a constant bit rate and a variable bit rate (Col 12 lines 10-29).

Claim 14, 80 Delvaux discloses an interface conforming to a UTOPIA level 2 specification (Col 13 line 66- Col 14 line 18).

Claim 15, 81 Delvaux discloses a number of physical layer devices connected to one another (see fig 8), where one skilled in the art can appreciate any of these physical layer devices can be considered as an external physical layer device.

Claim 16, 82 Delvaux discloses an ATM network providing switching (Col 1 line 66- Col 2 line 9).

Claim 17, 83 Delvaux does not specifically disclose DSLAM, however DSLAM is well known in the art as disclosed in the prior art (background) of the specification (Page 5 lines 9-15).

Claim 19, 84 Delvaux discloses a communication system between an ATM layer device (Fig 8 element 134) supporting a plurality of physical layer devices (Fig 8 elements 136). Delvaux discloses a number of different service classes (Col 12 lines 10-29),

where one skilled in the art can appreciate any two to be applied. Delvaux also discloses an interface between the ATM layer device and a plurality of physical layer devices (Col 13 line 66- Col 14 line 18). Delvaux discloses using a physical layer address to establish a connection. Delvaux also discloses using a physical address to select a range of possible physical devices to which a connection can be established (Col 15 lines 17- Col 16 line 21). Delvaux does not specifically disclose each class of service corresponding to a channel.

Delattre et al. (Delattre 'hereinafter') discloses a number of shapers (defined by class of service, VBR and ABR) dedicated for their respective ports/channels (see fig 5a and Col 9 lines 40-59).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the connection of an atm network device to a plurality of physical network devices as disclosed by Delvaux with the distribution of shapers from an atm network as disclosed by Delattre. The motivation for this modification is to establish flow control (Col 5 lines 27-43), within channel ports associated to a specific address.

Claim 20, 85 Delvaux does not disclose each channel/ port being adapted to carry either priority data or non-priority data.

Delattre discloses establishing priority within the network (Col 1 lines 36-67), and a number of shapers dedicated to a particular port based on this priority (Col 9 lines 21-35).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the teachings of Delvaux with the transmission of shapers as

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disclosed by Delattre in order to establish a certain degree of priority within the network (Col 1 lines 36-46). The motivation is the same as that for claim 1 and furthermore to establish priority.

Claim 21, 86 Delvaux discloses different classes having different timing relations (real-time or non-real-time) between source and destination (Col 12 lines 10-48). Delvaux does not specifically disclose priority data as real-time data, and non-priority data as non-real-time data. However, Delattre discloses real time data being considered as priority data (Col 1 lines 36-45). The motivation is the same as that for claim 19 or 3.

Claim 22, 87 Delvaux discloses a number of service classes defined by a constant bit rate and a variable bit rate (Col 12 lines 10-29).

Claim 23, 88 Delvaux discloses an ATM network providing switching (Col 1 line 66- Col 2 line 9).

Claim 24, 89 Delvaux does not specifically disclose DSLAM, however DSLAM is well known in the art as disclosed in the prior art (background) of the specification (Page 5 lines 9-15).

Claim 25, 90 Delvaux discloses using a DSL transfer medium (Col 13 lines 46-65).

Claim 33 Delvaux discloses an ATM layer device (Fig 8 element 134) supporting a plurality of physical layer devices (Fig 8 elements 136). Delvaux discloses a number of different service classes (Col 12 lines 10-29), where one skilled in the art can appreciate any two to be applied. Delvaux discloses VPI/VCI values associated with the ATM cell. The VCI/VPI values are used to distinguish between individual connections (Col 12 line 59- Col 13 line 37). Delvaux discloses two ports (see fig 8) for each physical layer

device. Delvaux also discloses an interface between the ATM layer device and a plurality of physical layer devices (Col 13 line 66- Col 14 line 18). Delvaux discloses using a physical layer address to establish a connection. Delvaux also discloses using a physical address to select a range of possible physical devices to which a connection can be established (Col 15 lines 17- Col 16 line 21). Delvaux does not specifically disclose each class of service corresponding to a port.

Delattre et al. (Delattre 'hereinafter') discloses a number of shapers (defined by class of service, VBR and ABR) dedicated for their respective ports (see fig 5a and Col 9 lines 40-59).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the connection of an ATM network device to a plurality of physical network devices as disclosed by Delvaux with the distribution of shapers from an atm network as disclosed by Delattre. The motivation for this modification is to establish flow control (Col 5 lines 27-43), within channel ports associated to a specific address.

Claim 34 Delvaux does not disclose each channel/ port being adapted to carry either priority data or non-priority data.

Delattre discloses establishing priority within the network (Col 1lines 36-67), and a number of shapers dedicated to a particular port based on this priority (Col 9 lines 21-35).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the teachings of Delvaux with the transmission of shapers as disclosed by Delattre in order to establish a certain degree of priority within the network

(Col 1 lines 36-46). The motivation is the same as that for claim 1 and furthermore to establish priority.

Claim 35 Delvaux discloses different classes having different timing relations (real-time or non-real-time) between source and destination (Col 12 lines 10-48). Delvaux does not specifically disclose priority data as real-time data, and non-priority data as non-real-time data. However, Delattre discloses real time data being considered as priority data (Col 1 lines 36-45). The motivation is the same as that for claim 33.

Claim 36 Delvaux discloses a number of service classes defined by a constant bit rate and a variable bit rate (Col 12 lines 10-29).

Claim 37 Delvaux discloses an ATM network providing switching (Col 1 line 66- Col 2 line 9).

Claim 38 Delvaux does not specifically disclose DSLAM, however DSLAM is well known in the art as disclosed in the prior art (background) of the specification (Page 5 lines 9-15).

Claim 39 Delvaux discloses using a DSL transfer medium (Col 13 lines 46-65).

Claim 40 Delvaux discloses an ATM layer device (Fig 8 element 134) supporting a plurality of physical layer devices (Fig 8 elements 136). Delvaux discloses a number of different service classes (Col 12 lines 10-29), where one skilled in the art can appreciate any two to be applied and determined by a predetermined set of rules. Delvaux discloses VPI/VCI values associated with the ATM cell. The VCI/VPI values are used to distinguish between individual connections (Col 12 line 59- Col 13 line 37). Delvaux discloses two ports (see fig 8) for each physical layer device and an interface between

the ATM layer device and a plurality of physical layer devices. Delvaux also discloses a number of physical layer device addresses (Col 13 line 66- Col 14 line 18). Delvaux also discloses an address extension device (element 160 in fig 8) connected to the interface (Col 14 line 57-Col 16 line 16). Delvaux discloses an address bus (element 169 in fig 8 and Col 14 line 57- Col 16 line 16) connecting the address extension device to a plurality of physical layer devices (second plurality of channel connections). Delvaux does not specifically disclose each port corresponding to a class of service.

Delattre et al. (Delattre 'hereinafter') discloses a number of shapers (defined by class of service, VBR and ABR) dedicated for their respective ports (see fig 5a and Col 9 lines 40-59).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the connections, including the address extension device as disclosed by Delvaux with the distribution of shapers from an ATM network as disclosed by Delattre. The motivation for this modification is to establish flow control (Col 5 lines 27-43), within channel ports associated to a specific address.

Claim 41 Delvaux does not disclose each channel/ port being adapted to carry either priority data or non-priority data.

Delattre discloses establishing priority within the network (Col 1 lines 36-67), and a number of shapers dedicated to a particular port based on this priority (Col 9 lines 21-35).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the teachings of Delvaux with the transmission of shapers as

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disclosed by Delattre in order to establish a certain degree of priority within the network (Col 1 lines 36-46). The motivation is the same as that for claim 1 and furthermore to establish priority.

Claim 42 Delvaux discloses different classes having different timing relations (real-time or non-real-time) between source and destination (Col 12 lines 10-48). Delvaux does not specifically disclose priority data as real-time data, and non-priority data as non-real-time data. However, Delattre discloses real time data being considered as priority data (Col 1 lines 36-45). The motivation for this is the same as that for claim 40.

Claim 43 Delvaux discloses a number of service classes defined by a constant bit rate and a variable bit rate (Col 12 lines 10-29).

Claim 44 Delvaux discloses an ATM network providing switching (Col 1 line 66- Col 2 line 9).

Claim 45 Delvaux does not specifically disclose DSLAM, however DSLAM is well known in the art as disclosed in the prior art (background) of the specification (Page 5 lines 9-15).

Claim 46 Delvaux discloses using a DSL transfer medium (Col 13 lines 46-65).

Claim 61 Delvaux discloses an ATM layer device (Fig 8 element 134) supporting a plurality of physical layer devices (Fig 8 elements 136) and a computing device (computer readable medium) between the two devices (Col 2 lines 57- 67). Delvaux discloses a number of different physical layer devices (first portion of logic) for receiving ATM cells via a number of communication channels. Delvaux also discloses a number of different service classes (Col 12 lines 10-29 and (Col 9 lines 35-55)). Delvaux

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discloses end nodes (second portion of logic) that use *VPI/VCI* values associated with the ATM cell. The *VCI/VPI* values are used to distinguish between individual connections (Col 12 line 59- Col 13 line 37), and a routing table (third portion of logic) is used to do so (Col 13 lines 16-36), where a routing table follows a set of predefined rules. Delvaux discloses (Col 14 lines 42-56) an ATM node (fourth portion of logic) that is configured (interfaced) with a data bus extender (address expansion device). Delvaux uses a routing table and *VPI/VCI* values to establish a connection to an identified port (Col 13 lines 16-36), where a routing table defines a predetermined set of rules. Delvaux discloses an interface (second local interface) that comprises a number of addressable units (Col 13 line 66- Col 14 lines 18). Delvaux discloses using a physical layer address to establish a connection. Delvaux also discloses using a physical address to select a range of possible physical devices to which a connection can be established (Col 15 lines 17- Col 16 line 21). Delvaux discloses each physical layer device containing two separate ports, where an identifier is used to identify and transmit cells to each. Delvaux does not specifically disclose each port/channel corresponding to a class of service.

Delattre et al. (Delattre 'hereinafter') discloses a number of shapers (defined by class of service, VBR and ABR) dedicated for their respective ports/channels (see fig 5a and Col 9 lines 40-59).

It would have been obvious to one of the ordinary skill in the art to modify the connections, including the address extension device as disclosed by Delvaux with the distribution of shapers from an ATM network as disclosed by Delattre. The motivation

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for this modification is to establish flow control (Col 5 lines 27-43), within channel ports associated to a specific address.

Claim 62 Delvaux does not disclose each channel/ port being adapted to carry either priority data or non-priority data.

Delattre discloses establishing priority within the network (Col 1 lines 36-67), and a number of shapers dedicated to a particular port based on this priority (Col 9 lines 21-35).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the teachings of Delvaux with the transmission of shapers as disclosed by Delattre in order to establish a certain degree of priority within the network (Col 1 lines 36-46). The motivation is the same as that for claim 1 and furthermore to establish priority.

Claim 63 Delvaux discloses different classes having different timing relations (real-time or non-real-time) between source and destination (Col 12 lines 10-48). Delvaux does not specifically disclose priority data as real-time data, and non-priority data as non-real-time data. However, Delattre discloses real time data being considered as priority data (Col 1 lines 36-45). The motivation is the same as that for claim 61.

Claim 64 Delvaux discloses a number of service classes defined by a constant bit rate and a variable bit rate (Col 12 lines 10-29).

Claim 65 Delvaux discloses an ATM network providing switching (Col 1 line 66- Col 2 line 9).

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Claim 66 Delvaux does not specifically disclose DSLAM, however DSLAM is well known in the art as disclosed in the prior art (background) of the specification (Page 5 lines 9-15).

Claim 67 Delvaux discloses using a DSL transfer (fifth portion of logic) medium (Col 13 lines 46-65).

Response to Arguments

3. Applicant's arguments filed April 11, 2005 have been fully considered but they are not persuasive.

(a) The applicant argued that the cited art does not disclose the Applicant's claimed "each of the plurality of physical layer devices having a first channel port associated with the first class of service and a second channel port associated with the second class of service".

The examiner maintains that the same limitation, in its broadest term, is already discussed in the rejection of claim 1, 10, 19, wherein Delattre discloses a first shaper distributing shapers to a first group of output ports, where these shapers are dedicated to a first class of service (Col 10 lines 45-62 and see fig 5a), therefore the first group of output ports are dedicated to a first class of service (Col 9 lines 1-59). Delattre also discloses a second shaper sending shapers, dedicated to a second class of service (see fig 5a class 1), to a second group of output ports.

The applicant also argued that the cited art does not disclose two ports, but discloses *two sets of input lines*. However it would have been obvious to one of the ordinary skill in the art at the time of the invention that input lines connect devices through ports associated with the ends of each line, located on the connecting devices. Furthermore, Delattre discloses a number of ports (see element 7 in fig 5).

(b) The applicant argued that the cited art does not disclose the Applicant's claimed "wherein at least two of the plurality of channel connections associated with the plurality of first channel ports is via no more than one of the plurality of addresses."

The examiner maintains that the same limitation, in its broadest term, is already discussed in the rejection of claim 1 and 19, wherein Delvaux discloses a plurality of physical layer devices in communication using an address line (Col 13 lines 66-Col 14 line 18), where it would have been obvious to one of the ordinary skill in the art at the time of the invention that if one address line is used for a plurality of physical layer devices communicating with an ATM layer device (Col 13 lines 66-Col 14 line 18), only one address is necessary to route information out of the physical layer devices. Delvaux discloses the address line functioning as an address (Col 14 lines 19-42).

Furthermore, Delattre discloses a point to multi point configuration from a first class (class 0 in fig 5a) to a group of first output ports (see fig 5a). It would have been obvious to one of the ordinary skill in the art at the time of the invention that a point to multipoint connection may use one address to access a number of connections.

(c) The applicant argued that the cited art does not disclose the Applicant's claimed "each of the first plurality of channel connections via one of a portion of a plurality of addresses associated with the first local interface; an address expansion device in communication with the first local interface via the remaining portion of the plurality of addresses"

The examiner maintains that the same limitation, in its broadest term, is already discussed in the rejection of claim 19, wherein Delvaux discloses an address expansion device within an ATM layer device in communication with a plurality of addressable physical layer devices via a number of address lines, where the address lines function as addresses (Col 13 line 66-Col 14 line 42). Furthermore, Delvaux discloses an interface between (element 135) between an ATM layer device containing an address expansion device, and physical layer devices, each separately addressable with address lines (Col 14 line 57-Col 15 line 16).

(d) The applicant argued that the cited art does not disclose the Applicant's claimed "where the ATM cell corresponds to the first class of service, providing the ATM cell to all of the first channel ports via a first unique address on the local interface."

Delvaux discloses an interface containing a number of address lines, where each of the address lines function as an address (Col 13 line 66-Col 14 line 42).

Delattre discloses an ATM switch with shapers dedicated to a class of service (Col 10 lines 45-62 and see fig 5a), where a first shaper corresponding to a first class of service is output to a first group of output ports (Col 9 lines 1-59).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the ATM layer device to contain a number of shapers dedicated to a number of output ports, where each output port corresponds to a given shaper or class of service.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Grey whose telephone number is (571)272-3160. The examiner can normally be reached on 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571)272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Grey
Examiner
Art Unit 2667

C. Grey
8/23/05

A. Qureshi
AFSAR QURESHI
PRIMARY EXAMINER 9/2/2005